

Introduction. Destabilization as a Phenomenon of Social Dynamics*

Leonid E. Grinin

*HSE University, Moscow;
Institute of Oriental Studies,
RAS, Moscow*

Andrey V. Korotayev

*HSE University, Moscow;
Institute of Oriental Studies,
RAS, Moscow*

The present issue, subtitled *Entropy and Destabilization* (which is the tenth in the series), is largely devoted to the various manifestations of destabilization. Destabilization, or at least the threat of it, is an inevitable stage in the historical development of any society. The question is to what extent a society is capable of resisting it, how institutionalized and adaptive, using S. Huntington's characteristics (Huntington 1968), it is to the various threats. The analysis shows that, on the one hand, societies capable of achieving a sustainably reproducible order are able not only to overcome such threats, but also to institutionalize mechanisms that will prevent the occurrence of such situations. On the other hand, historical experience shows that institutions become outdated and insufficiently effective. As a result, they no longer protect society from crises as they used to do. The migration crisis that hit Europe in early 2015 nearly split it, causing political disarray in a number of states, and showed that European countries at that time had forgotten to do what they used to do so well in previous years: to strictly maintain order and protect their borders. The 2016 and 2020 U.S. presidential elections caused a considerable division of American society and an unprecedented confrontation in the political system since the Civil War. And the consequences of this confrontation continue to have a huge impact on American society.

* This research has been supported by the Russian Science Foundation (Project № 23-18-00535).

The World-System as a whole is also subject to destabilization. The COVID-19 pandemic shook many countries, causing a rift in many societies, and the effects of the vaccination are still affecting the health of millions of people. The anti-COVID measures led to a deep economic and energy crisis. The beginning of the SMO (Special Military Operation) caused a deep division in the world and danger of even greater destabilization (see Grinin 2022a, 2023).

Thus, no regime, no society, no system has an indulgence against destabilization. One can agree with Huntington's idea that 'the most important political distinction among countries concerns not their form of government but their degree of government' (Huntington 1968: 3). Therefore, societies and states where the mechanisms to counter such challenges are not institutionalized to the necessary extent are much more susceptible to destabilizing situations and factors. At the same time, different factors can affect certain societies in different ways, which is due to their historical and political peculiarities. Moreover, the response depends considerably on the particular moment and situation (see Korotayev *et al.* 2017; Grinin and Grinin in this volume; Korotayev and Khokhlova 2023; Grinin *et al.* 2023). Nevertheless, one can identify some trends and patterns in factors capable of causing destabilization. The combination of these factors is also important (and accounting for such combinations is undoubtedly problematic). More or less significant relationships can arise with respect to a variety of parameters. Thus, the influence of the normalized number of Internet users on the potential for socio-political destabilization was studied (Romanov *et al.* 2021). This research has found that Internet penetration positively correlates to a greater degree with mass relatively non-violent destabilization and rather negatively correlates with more violent or elite destabilization (Grinin 2021).

This emphasizes the importance of studying such factors, determining the degree of their danger, the environment in which they can manifest themselves most unexpectedly and severely, the levels of indicators showing an increased risk of destabilization, *etc.*

Any society can be considered as a system, which is influenced by external and internal factors. Taking into account the degree of these influences, the balance of exogenous and endogenous factors is one of the most difficult types of analysis especially since there are complex positive and negative feedbacks between them, which can both strengthen and weaken certain impulses. This consideration is especially important for understanding the causes for the success or failure of major transformations. It is even more important when analyzing instability and its factors, especially the causes of major upheavals such as revolutions (see Goldstone *et al.* 2022) (see above on the world events that cause destabilization in the World-System as a whole). However, even seemingly internal events, such as presidential elections, become global factors (es-

pecially in the case of the United States), capable of causing political transformations in different places.

In our research we have considered various aspects related to destabilization in society, in particular, the impact of modernization on possible destabilization in society.¹ There are a number of studies which investigate the relations between revolutions and the level of modernization of a society (see, *e.g.*, Lipset 1959; Cutright 1963; Moore 1966; Huntington 1968, 1986; Tilly 1986; Dahl 1971; Brunk, Caldeira, and Lewis-Beck 1987; Rueschemeyer, Stephens E., and Stephens J. 1992; Burkhart and Lewis-Beck 1994; Londregan and Poole 1996; Epstein *et al.* 2006; Boix 2011; Goldstone 2001, 2014; Hobsbawm 1996; Mau and Starodubrovskaya 2001). In particular, according to Huntington (1968, 1986), it is not unusual for economic processes in modernizing societies to significantly outpace political ones or, conversely, for the latter to lag behind the former.

Developing the ideas of various researchers on the connection between modernization and revolutions, we created the theory of the modernization trap and showed that as a result of the escape from the Malthusian trap a society can fall into a new trap denoted as the modernization trap. This trap is associated with the lagging of productive forces behind the population's growth rate, that is with insufficiently rapid technological growth and generally insufficient dynamism of changes. The core element of the modernization process is industrialization and associated deep changes. Modernization gives an opportunity to escape from the Malthusian trap. But in the process of escaping from it, as well as in the process of changing society, there is a great danger of falling into a different type of trap – a modernization trap which, on the contrary, is the result of excessively rapid changes, to which a number of societal important relations and institutions do not have time to adapt. Due to the inability of many traditional institutions, relations, and ideologies to keep up with changes in technology, communications, the system of education, the medical sphere, and demographic structures, strong prerequisites for a revolutionary crisis emerge. The mechanisms for triggering the modernization trap may be different, but they are all associated with the emergence of a crisis in the conditions of a preceding it more or less long recovery and growth.

Destabilization may well be a subject of historical and mathematical and sociological and mathematical analyses. In particular, it makes sense to present some interesting results from our monograph (Korotayev, Grinin, and Issaev 2021; Slinko *et al.* 2021).

¹ See also our studies of the complex relationship between the processes covered by the terms of modernization and revolutions (*e.g.*, Grinin 2012, 2013, 2017a, 2017b, 2022b; Grinin and Korotayev 2012a, 2012b; Korotayev *et al.* 2011; Korotayev, Grinin *et al.* 2017).

Thus, a typology of destabilization based on quantitative analysis was proposed by Slinko *et al.* (2021). Using the principal component analysis, four types of destabilization have been identified: (1) mass destabilization, which involves mainly non-violent mass demonstrations; (2) abrupt regime change, mainly through coups; (3) armed destabilization, for example terrorist attacks; (4) intra-elite destabilization, the intensity of which varies from government crises to political assassinations and coups. The analysis of the relationship between socio-political and economic indicators and the four types of instability shows that each type of destabilization is characterized by its own sociopolitical conditions that contribute to its occurrence. The analysis shows that sociopolitical characteristics affect various types of destabilization differently. In fact, only a parameter such as regime type proved to be significant for all four types, and one of them, factional democracy, appeared to be a good predictor of a high level of instability for all four types. In turn, autocracies are more susceptible to coups than other types of instability, but they have a relatively low risk of mass destabilization. The share of the young population has a positive effect on armed and intra-elite destabilization, but a negative effect on the risk of abrupt regime change and proves to be an insignificant factor for mass destabilization.

The correlation between GDP per capita and the intensity of anti-government protests has also been investigated (Korotayev *et al.* 2021b; see also Korotayev *et al.* 2020, 2021a). Answering the question why the better people live, the more likely they are to join anti-government protests, the authors draw attention to the fact that previous studies have revealed a somewhat paradoxically strong positive correlation between GDP per capita and the intensity of anti-government demonstrations (indeed, it turns out that the better people live, the more likely they take to the streets with anti-government protests)².

Thus, the changes in the economic situation are one of the most important predictors of possible destabilization. It is not without reason that unrest, various forms of protest, and revolutions are much more likely to begin precisely during the period of worsening economic situation. But the combination of external and internal factors is also extremely important for understanding the resultant force.

The tests conducted by Korotayev *et al.* (2021b; see also Korotayev *et al.* 2020, 2021a) show that democratization and urbanization, as well as the expan-

² Such conclusions elaborate the conclusions drawn in the classic works by M. Olson (1963) and S. Huntington (1968) that there is an inverted U-shaped curvilinear relationship between per capita income and the level of socio-political destabilization but not a negative correlation. Huntington himself denoted it as a ‘bell-shaped’ relationship (Huntington 1968: 43).

sion of formal education, appear to be the main factors contributing to the positive correlation between per capita GDP and the intensity of anti-government demonstrations, as urbanization, democratization, and the growth of public education lead to an increase in the intensity of protests. Moreover, when controlling for these factors, the correlation between per capita GDP and anti-government protests becomes negative. Thus, high per capita GDP turns out to be a significant proximate negative factor affecting the intensity of anti-government demonstrations, but at the same time it is an ultimate (even more significant) positive factor in the intensity of protests. The growth of per capita GDP is quite naturally accompanied by an increase in the level of urbanization, democratization, and education, which more than compensates for the direct deterrent effect on protests on the part of the growing per capita GDP (at least for low- and middle-income countries). In addition, the negative binomial regression model proposed by the authors can explain not only the strong positive correlation between per capita GDP and the intensity of protests, which can be traced for a range of GDP values below US\$ 20,000, but also significantly weaker negative correlation recorded for a range above US\$ 20,000. The fact is that in rich countries the indicators of urbanization, democratization, and education reach a saturation level, and the vast majority of high-income countries have more or less similar levels for all three indicators. As a result, for the zone of per capita GDP values above US\$ 20,000, we are dealing with an automatic control of the correlation between GDP per capita and the intensity of protests for the democratization, education, and urbanization factors, and, as our model predicts, the final effect of further GDP per capita growth on the intensity of protests for high-income countries becomes rather negative than positive.

Thus, destabilization is a huge topic. We hope that the present issue will add new aspects to its study.

* * *

The issue consists of four sections: (I) Historical Aspects; (II) Social and Cultural Aspects; (III) Factors of Destabilization; (IV) Reviews and Notes.

Section I 'Historical Aspects' includes one article by **Antony Harper** ('An Investigation of the Relationships between Empirical Trends in Both Entropy and Maximum Urban Area Size Over the Last 5,000 Years'). It investigates the relationship between system entropy and population, but does so using empirical data for both entropy, based on total world-system population size, maximum urban area population size, and gamma, γ , a fitted constant and natural log-transformed population data for maximum urban area, all over the last 5,000 years. First, basic entropy trends over human history are investigated, and then by selectively removing outlier points, a process called skeletoniza-

tion, more detailed patterns of entropy are revealed and analyzed. It is shown that a pattern of alternating increasing and decreasing system entropy is associated with alternating periods of stasis and punctuation of maximum urban area size. Also, it is shown that embedded within the pattern of alternating increasing and decreasing entropy are linear and non-linear entropy patterns. Some speculation on the adaptive function of such geometries is shared. Further, the potential of the entropy pattern as a standard of comparison for other historical trends are discussed.

Section II 'Social and Cultural Aspects' contains two contributions.

The section opens up with the article by **Arno Tausch** ('From the Periphery to the Center of Global Knowledge Production? A Bibliometric Analysis of the Evolution of a Social Science Community from a Small Country: Austria'). It provides a bibliometric analysis of the global presence of Austrian political science (104 senior political scientists) based on Scopus and OCLC WorldCat. The global market presence indicators are the number of articles indexed in Scopus; the total number of quotations documented in Scopus; the H-Index according to Scopus; OCLC WorldCat: book with the largest global library presence; OCLC WorldCat: book with the second largest global library presence; OCLC WorldCat: book with the third largest global library presence. The results of a promax factor analysis of the data and the rankings of the global presence of Austrian political science according to the criteria used in this article are presented.

There is ample evidence of a successful publication strategy based on the international journals, indexed in Scopus and the diffusion of book titles in the global libraries, contained in the OCLC WorldCat by a significant proportion of the Austrian political science community. The data from the Clarivate Analytics Web of Science support the author's contentions including for the period of 1970–2019.

The arguments against an international publication strategy, citing the global science enterprise as an international mode of power, are utterly wrong. There is no alternative to mainstream scientific publishing with major international journal and book publishers.

The article by **Leonidas A. Papakonstantinidis** and **Stephen I. Ternyik** ('Empathy and Conflict Strategy: An Inquiry into T. Schelling's "The Strategy of Conflict"') based on the T. Schelling's strategy of conflict (1960) deals with the equilibrium conditions and strategy between empathy and conflict. Their research explores whether the win-win-win Papakonstantinidis model (2002) as a conflict strategy can coexist with empathy as a pure behavioural condition aimed at improving bargaining power. Analytically, they investigate the interaction, empathy-global bargain, in a subjective and objective way.

Section III 'Factors of Destabilization' includes three articles.

Leonid E. Grinin and **Anton L. Grinin** in their contribution ('Revolutionary Process of the 20th Century: A Quantitative Analysis') suggest that with the accelerated process of modernization the number of revolutions has increased. The 20th century witnessed many events of this kind. The authors analyze the main features of the twentieth-century revolutions, and their difference from those of the 19th century. In the 20th century, revolutionary activities increasingly moved from the World System core to its semi-periphery or even to the periphery (in the 19th century, though they often happened not in the core, but close to it, which sometimes allowed countries that survived the revolution to move to the core). As a result, the influence of revolutions on the historical process changed and their role as driving forces of progress in respect of the World System generally decreased. Also, guerilla warfare in the revolutionary societies of the periphery and semi-periphery became very common. New types of revolution emerged, and less widespread types further diffused. First of all, these were Communist revolutions, and toward the end of the century as a result of the decline of Communism – anti-communist ones as well as power-modernist and others. The authors offer a new typology of revolutions. The twentieth-century revolutionary process is described in chronological order as comprising four revolutionary waves and intervening periods (like the 1930s, or the 1950s – 1970s) when revolutionary waves were not observed. Significant differences in the characteristics of revolutions in the first and second half of the 20th century are shown. Some aspects of the theory of revolution as applied to revolutions of the 20th century are considered. In particular, the concept of lines of revolutions is introduced; their connection with revolutionary waves and differences from them are shown. The lines of revolutions show significant similarities in the causes, character, goals and results of revolutions of certain periods (up to three-four decades). Moreover, the lines of revolutions do not coincide with the waves of revolutions. The wave of revolutions is a more objective concept associated with a group of fairly close-in-time events (often associated with a specific region and some common world-system event). The line is a more theoretical construct, combining cases of different chronologies from different waves, but there are also quite objective things behind it. Nine lines of revolutions are analyzed (five in the first half of the century, four in the second one). Much attention is paid to the analysis of revolution as one of the transformative changes (along with others – including coups, reforms, violent modernization, *etc.*) in society and in relation to different periods. For such an analysis, the term 'analogue of revolution' is introduced. Revolution analogues are those sociopolitical events that result in a change of political regime and profound transformations in sociopolitical structure; but this change takes place

not by mobilizing the masses and protest actions against the existing government, but by other means: a peaceful constitutional movement coming to power; military coup; conspiracy and palace coup; constitutional coup (*e.g.*, the impeachment of the president, *etc.*). An important feature of the revolution analogue (and not just reforms, transformations, modernization, *etc.*) can be considered the subsequent mobilization of the masses, that is, the mobilization of masses in the course of social and political transformations after the seizure of power by the new elite. The paper also includes two appendices, which contain a Table with the data on revolutionary events of the 20th century, as well as diagrams with correlations and ratios of different types and subtypes of revolutions as well as other revolutionary events.

The article by **Andrey V. Korotayev** and **Alina A. Khokhlova** ('Sociopolitical Destabilization Dimensions in Comparative Global and Regional Perspective') examines empirically political instability using a principal component analysis. Conducted tests have allowed the authors to identify its three types: (1) 'armed destabilization' with the main contributions on the part of number of killed in terror attacks, number of terror attacks, and guerilla warfare; (2) 'mass protest destabilization' with the main contributions on the part of anti-government demonstrations, riots, and general strikes; and (3) 'elite destabilization' with the main contributions on the part of governmental crises, coups and coup attempts, assassinations, and purges. Their analysis further demonstrates that some MENA countries are the most violently destabilized in the whole world for the period of 1970–2018 among all other countries. These results are supported by the mean factor score values of socio-political destabilization principal components for four world-system regions for three observation periods which show that, both for 1970–2018 and after 2011 periods, the Afrasian instability macrozone in general, and the MENA region in particular, turn out as the areas of the highest mean values of armed destabilization factor scores. Moreover, the conducted tests show that MENA is the only region where mass protest destabilization component is associated with repressions both for the general observation period (1970–2018) and for the period after the Arab Spring (since 2011) while for other regions the correlation with purges/repressions indicator is insignificant, though positive (South America and Sub-Saharan Africa) or even insignificant and negative (Western Europe). This appears to imply that in the MENA region protests are accompanied by mass repressions much more systematically than in the other parts of the world. However, the authors find the presence of number of terror attacks among the significant contributors to mass protest destabilization for Sub-Saharan Africa, which suggests that the mass protest destabilization in that part of the world is also of a rather special type involving a very substantial violent component. In

the meantime, the principal component analysis of the destabilization in the MENA region (considered as a semi-peripheral world-system area) in comparison with South America (another world-system area), Western Europe (regarded as a part of the world-system core), and Sub-Saharan Africa (as a part of the world-system core) has yielded the following results. In general, the authors find that the highest percent of the destabilization variance is explained by the mass protest principal component for the world-system core (represented by Western Europe); but the lowest percent of the destabilization variance is explained by the armed destabilization principal component precisely for this part of the world. They also find that the highest percent of the destabilization variance is explained by the armed principal component for the world-system periphery (represented by Sub-Saharan Africa); and the lowest percent of the destabilization variance is explained by the mass protest destabilization principal component precisely for Sub-Saharan Africa. The world-system semi-periphery appears here in between those poles. The MENA region (which is the core of the Afrasian instability macrozone) ranks the second for both mass protests and armed destabilization, thus displaying very high levels of both (whereas South America occupies an intermediate place between MENA and Western Europe).

According to **Leonid E. Grinin**, **Sergey V. Malyzhenkov**, **Stanislav E. Bilyuga**, and **Andrey V. Korotayev** ('Students and Sociopolitical Destabilization: A Quantitative Analysis') there are reasonable grounds to expect that the increasing proportion of students in the total population may be accompanied by socio-political destabilization. However, up to the present there has been no empirical testing of this theoretical assumption. The empirical verification is provided in this article. And this theoretical expectation supported by empirical tests. This research suggests that students as a social group can be seen in some respects as an important factor of destabilization. It demonstrates statistically significant positive correlations between the proportion of students in the total population and important indicators of socio-political destabilization, such as the intensity of political strikes, riots and especially anti-government demonstrations. A particularly strong positive correlation between the proportion of students in the population and the intensity of anti-government demonstrations is observed in the per decile analysis. The significant difference in the correlation between the proportion of students and the intensity of riots, on the one hand, and the proportion of students in the population and the intensity of anti-government demonstrations, on the other (with the advantage in the strength of the correlation towards anti-government demonstrations), is to a certain extent explained by gender factor. The fact is that the growing number of female students at a certain stage of the development of the country and its education system does not contribute to the intensity of riots, but it does contribute to the

intensity of anti-government demonstrations. However, equally important is the absence of statistically significant correlation between the proportion of students in the total population and such indicators of socio-political destabilization as the intensity of political assassinations and major terrorist and 'guerrilla' attacks. Thus, the high proportion of students in the population correlates with an increasing level of mass destabilization (and especially with an increasing level of mass non-violent destabilization). At the same time, it turned out that the increasing number of students can be not only destabilizing but also in some respects a stabilizing factor. It was revealed that there is a negative rather than positive correlation between the proportion of students in the population and the intensity of coups and attempted coups, since the large number of students in a country will not facilitate but complicate coups. Thus, while a high proportion of students in the population contributes to mass socio-political destabilization, it rather makes it difficult to implement such a classic elitist form of regime change as a coup d'état.

Section IV 'Reviews and Notes' contains **George Lawson's** review of *Handbook of New Waves of Revolutions in the 21st Century: The New Waves of Revolutions, and the Causes and Effects of Disruptive Political Change* published by Springer International Publishing in 2022.

References

- Boix C. 2011.** Democracy, Development, and the International System. *American Political Science Review* 105(4): 809–828. URL: <https://doi.org/10.1017/S000305541100402>.
- Brunk G. G., Caldeira G. A., and Lewis-Beck M. S. 1987.** Capitalism, Socialism, and Democracy: An Empirical Inquiry. *European Journal of Political Research* 15(4): 459–470.
- Cutright P. 1963.** National Political Development: Social and Economic Correlates. *Politics and Social Life: An Introduction to Political Behavior* / Ed. by N. W. Polsby, R. A. Dentler, and P. A. Smith, pp. 569–582. Boston: Houghton Mifflin.
- Dahl R. A. 1971.** *Polyarchy: Participation and Opposition*. New Haven: Yale University Press.
- Epstein D. L., Bates R., Goldstone J., Kristensen I., and O'Halloran S. 2006.** Democratic Transitions. *American Journal of Political Science* 50(3): 551–569.
- Goldstone J. A. 2001.** *Toward a Fourth Generation of Revolutionary Theory*. Annual Review of University of California Press.
- Goldstone J. A. 2014.** *Revolutions: A Very Short Introduction*. Oxford University Press.
- Goldstone J. A., Grinin L. E., and Korotayev A. V. (Eds.) 2022.** *Handbook of Revolutions in the 21st Century: The New Waves of Revolutions, and the Causes and Effects of Disruptive Political Change*. Springer.

- Grinin L. 2012.** Arab Spring and Reconfiguration of the World-System. *System Monitoring of Global and Regional Risks* / Ed. by A. Korotayev, Yu. V. Zin'kina, and A. A. Khodunov, pp. 188–223. Moscow: URSS, LIBROKOM. *In Russian* (Гринин Л. Е. Арабская весна и реконфигурация Мир-Системы. *Системный мониторинг глобальных и региональных рисков* / Ред. А. В. Коротаев, Ю. В. Зинькина, А. А. Ходунов, с. 188–223. М.: УРСС; ЛИБРОКОМ).
- Grinin L. 2013.** The State and Crises in the Modernization Process. *Filosofiya i obshchestvo* 3: 29–59. *In Russian* (Гринин Л. Е. Государство и кризисы в процессе модернизации. *Философия и общество* 3: 29–59).
- Grinin L. 2017a.** The Russian Revolution and the Modernization Traps. *Polis. Politicheskiiye issledovaniya* 4: 138–155. *In Russian* (Гринин Л. Е. Русская революция и ловушки модернизации. *Полис. Политические исследования* 4: 138–155).
- Grinin L. 2017b.** The Russian Revolution in the Light of the Modernization Theory. *Istoriya i sovremennost'* 2: 22–57. *In Russian* (Гринин Л. Е. Российская революция в свете теории модернизации. *История и современность* 2: 22–57).
- Grinin L. E. 2021.** The Formation of Mature Social Relations and Possible Destabilization in the Countries of the Afrasian Macrozone of Instability. *Socio-Political Destabilization in the Countries of the Afrasian Macrozone of Instability: Quantitative Analysis and Risk Prediction* / Ed. by A. V. Korotayev, L. E. Grinin, and S. Yu. Malkov, pp. 687–702. Moscow: LENAND. *In Russian* (Гринин Л. Е. Формирование зрелых общественных отношений и возможная дестабилизация в странах афразийской макрзоны нестабильности. *Социально-политическая дестабилизация в странах Афразийской макрзоны нестабильности: количественный анализ и прогнозирование рисков* / Ред. А. В. Коротаев, Л. Е. Гринин, С. Ю. Малков, с. 687–702. М.: ЛЕНАНД).
- Grinin L. E. 2022a.** What does the Coming Year Prepare for Us? Economic Forecasts for 2023. *Istoricheskaya psikhologiya i sotsiologiya istorii* 2: 5–13. *In Russian* (Гринин Л. Е. Что год грядущий нам готовит? Экономические прогнозы на 2023 год. *Историческая психология и социология истории* 2: 5–13).
- Grinin L. E. 2022b.** Revolution and Modernization Traps. *Handbook of Revolutions in the 21st Century: The New Waves of Revolutions, and the Causes and Effects of Disruptive Political Change* / Ed. by J. A. Goldstone, L. E. Grinin, and A. V. Korotayev, pp. 219–238. Springer.
- Grinin L. E. 2023.** What does the Coming Year Prepare for Us? Geopolitical Forecasts for 2023. *Istoricheskaya psikhologiya i sotsiologiya istorii* 1. (In press). *In Russian* (Гринин Л. Е. Что год грядущий нам готовит? Геополитические прогнозы на 2023 год. *Историческая психология и социология истории* 1). (В печати).
- Grinin L. E., and Grinin A. L. 2023.** Revolutionary Process of the 20th Century: A Quantitative Analysis. *History & Mathematics: Entropy and Destabilization* / Ed. by L. E. Grinin, and A. V. Korotayev, pp. 88–173. Volgograd: Uchitel.

- Grinin L. E., and Korotayev A. V. 2012a.** *Cycles, Crises, Traps of the Modern World-System. The Study of Kondratieff, Juglar and Secular Cycles, Global Crises, Malthusian and Post-Malthusian Traps.* Moscow: LKI/URSS. In Russian (Гринин Л. Е., Коротаев А. В. Циклы, кризисы, ловушки современной Мир-Системы. Исследование кондратьевских, жюгляровских и вековых циклов, глобальных кризисов, мальтузианских и постмальтузианских ловушек. М.: ЛКИ/URSS).
- Grinin L. E., and Korotayev A. V. 2012b.** Does 'Arab Spring' Mean the Beginning of World-System Reconfiguration? *World Futures* 68(7): 471–505. Doi.org/10.1080/02604027.2012.697836.
- Grinin L. E., Malyzhenkov S., Bilyuga S. E., and Korotayev A. V. 2023.** Students and Sociopolitical Destabilization: A Quantitative Analysis. *History & Mathematics: Entropy and Destabilization* / Ed. by L. E. Grinin, and A. V. Korotayev, pp. 214–227. Volgograd: Uchitel.
- Hobsbawm E. J. 1996.** *The Age of Revolution: Europe, 1789–1848.* New York: Vintage.
- Huntington S. 1968.** *Political Order in Changing Societies.* New Haven: Yale University Press.
- Huntington S. 1986.** Revolution and Political Order. *Revolutions: Theoretical, Comparative, and Historical Studies* / Ed. by J. A. Goldstone, pp. 39–47. San Diego: Harcourt Brace Jovanovich.
- Korotayev A., Bozhevolskiy J., Grinin L., Zinkina Y., and Malkov S. 2011.** A Trap at the Escape from the Trap? Logistic and Mathematical Models. *Future Projects and Risks: Concepts, Models, Tools and Projections* / Ed. by A. A. Akaev, A. Korotayev, G. G. Malinetsky, S. Malkov, pp. 138–164. Moscow: Krasand. In Russian (Коротаев А. В., Божевольнов Ю. В., Гринин Л. Е., Зинькина Ю. В., Малков С. Ловушка на выходе из ловушки. Логические и математические модели. Проекты и риски будущего: концепции, модели, инструменты и прогнозы / Ред. А. А. Акаев, А. В. Коротаев, Г. Г. Малинецкий, С. Малков, с. 138–164. М.: Красанд).
- Korotayev A., Grinin L., Bilyuga S., Mescherina K., and Shishkina A. 2017.** Economic Development, Sociopolitical Destabilization and Inequality. *Sotsiologicheskoye obozreniye* 16(3): 9–35. Doi.org/10.17323/1728-192X-2017-3-9-35.
- Korotayev A. V., Grinin L. E., Issaev L. M., Bilyuga S. E., Vaskin I. A., Slinko E. V., Shishkina A. R., and Mescherina K. V. 2017.** *Destabilization: Global, National, and Natural Factors and Mechanisms.* Moscow: Moscow Branch of Publishing House 'Uchitel'. In Russian (Коротаев А. В., Гринин Л. Е., Исаев Л. М., Билюга С. Э., Васькин И. А., Слинко Е. В., Шишкина А. Р., Мещерина К. В. Дестабилизация: глобальные, национальные, природные факторы и механизмы. М.: Московская редакция издательства «Учитель»).
- Korotayev A., Sawyer P., Grinin L., Romanov D., and Shishkina A. 2020.** Socio-Economic Development and Anti-Government Protests in Light of a New Quantitative Analysis of Global Databases. *Sotsiologicheskij Zhurnal* 26(4): 61–78. Doi.org/10.19181/socjour.2020.26.4.7642.

- Korotayev A. V., Grinin L. E., and Issaev L. M. 2021.** Introduction. The Afrasian Macrozone of Instability as an Important Source of Destabilization Risks in the Modern World-System. *Socio-Political Destabilization in the Countries of the Afrasian Macro-Zone of Instability: Quantitative Analysis and Risk Prediction* / Ed. by A. V. Korotayev, L. E. Grinin, and S. Yu. Malkov, pp. 7–50. Moscow: LENAND. *In Russian* (Коротаев А. В., Гринин Л. Е., Исаев Л. М. Социально-политическая дестабилизация в странах афразийской макрзоны нестабильности: количественный анализ и прогнозирование рисков / Ред. А. В. Коротаев, Л. Е. Гринин, С. Ю. Малков, с. 7–50. М.: ЛЕНАНД).
- Korotayev A., Sawyer P., and Romanov D. 2021a.** Socio-Economic Development and Protests. A Quantitative Reanalysis. *Comparative Sociology* 20(2): 195–222. Doi.org/10.1163/15691330-bja10030.
- Korotayev A. V., Sawyer P. S., Romanov D. M., Grinin L. E., and Shishkina A. R. 2021b.** On the Reasons for the Positive Correlation between Per Capita GDP and the Intensity of Anti-Government Protests (or Why, the Better People Live, the More They Protest?). *Socio-Political Destabilization in the Countries of the Afrasian Macro-Zone of Instability: Quantitative Analysis and Risk Prediction* / Ed. by A. V. Korotayev, L. E. Grinin, and S. Yu. Malkov, pp. 262–280. Moscow: LENAND. *In Russian* (Коротаев А. В., Сойер П. С., Гринин Л. Е., Романов Д. М., Шишкина А. Р. О причинах положительной корреляции между ВВП на душу населения и интенсивностью антиправительственных протестов (или почему, чем люди лучше живут, тем больше они протестуют?). Социально-политическая дестабилизация в странах афразийской макрзоны нестабильности: количественный анализ и прогнозирование рисков / Ред. А. В. Коротаев, Л. Е. Гринин, С. Ю. Малков, с. 262–280. М.: ЛЕНАНД).
- Korotayev A. V., and Khokhlova A. 2023.** Sociopolitical Destabilization Dimensions in Comparative Global and Regional Perspective. *History & Mathematics: Entropy and Destabilization* / Ed. by L. E. Grinin, and A. V. Korotayev, pp. 174–213. Volgograd: Uchitel.
- Lewis-Beck M. S. 1994.** Comparative Democracy: The Economic Development Thesis. *American Political Science Review* 88(4): 903–910. Doi.org/10.2307/2082715.
- Lipset S. M. 1959.** Some Social Requisites of Democracy: Economic Development and Political Legitimacy. *American Political Science Review* 53(1): 69–105.
- Londregan J. B., and Poole K. T. 1996.** Does High Income Promote Democracy? *World Politics* 49: 1–30.
- Mau V., and Starodubrovskaya I. 2001.** *Great Revolutions: From Cromwell to Putin.* Moscow: Vagrius. *In Russian* (Мау В. А., Стародубровская И. В. Великие революции: от Кромвеля до Путина. М.: Вагриус).
- Moore B. 1966.** *Social Origins of Dictatorship and Democracy.* Boston: Beacon Press.
- Olson M. 1963.** Rapid Growth as a Destabilizing Force. *The Journal of Economic History* 23(4): 529–552.
- Papakonstantinidis L. A. 2002.** *Win-win-win Model.* 1st presentation. Visby University SW – Euro-academy (14th ed.).

- Romanov D. M., Bilyuga S. E., and Korotayev A. V. 2021.** The Impact of the Normalized Number of Internet Users on the Potential for Socio-Political Destabilization: A Preliminary Qualitative Analysis. *Socio-Political Destabilization in the Countries of the Afrasian Macro-Zone of Instability: Quantitative Analysis and Risk Prediction* / Ed. by A. V. Korotayev, L. E. Grinin, and S. Yu. Malkov, pp. 248–261. Moscow: LENAND. *In Russian* (Романов Д. М., Билюга С. Э., Коротаев А. В. Влияние удельного числа интернет-пользователей на потенциал социально-политической дестабилизации: опыт предварительного качественного анализа. *Социально-политическая дестабилизация в странах афразийской макрзоны нестабильности: количественный анализ и прогнозирование рисков* / Ред. А. В. Коротаев, Л. Е. Гринин, С. Ю. Малков, с. 248–261. М.: ЛЕНАНД).
- Rueschemeyer D., Stephens E. H., and Stephens J. D. 1992.** *Capitalist Development and Democracy*. Chicago, IL – Burkhart, RE: University of Chicago Press.
- Schelling Th. C. 1960.** *The Strategy of Conflict*. (Reprint 1980). Cambridge, MA: Harvard University Press.
- Slinko E. V., Mescherina K. V., Shulgin S. G., Zinkina Yu. V., Bilyuga S. E., and Korotayev A. V. 2021.** The Types of Instability and Their Relationship with Socio-political and Economic Variables: Factor Analysis Using the Principal Component Analysis. *Socio-Political Destabilization in the Countries of the Afrasian Macro-Zone of Instability: Quantitative Analysis and Risk Prediction* / Ed. by A. V. Korotayev, L. E. Grinin, and S. Yu. Malkov, pp. 170–181. Moscow: LENAND. *In Russian* (Слинько Е. В., Мещерина К. В., Шульгин С. Г., Зинькина Ю. В., Билюга С. Э., Коротаев А. В. Типы нестабильности и их связь с социально-политическими и экономическими переменными: факторный анализ методом главных компонент. *Социально-политическая дестабилизация в странах афразийской макрзоны нестабильности: количественный анализ и прогнозирование рисков* / Ред. А. В. Коротаев, Л. Е. Гринин, С. Ю. Малков, с. 170–181. М.: ЛЕНАНД).
- Tilly C. 1986.** Does Modernization Breed Revolution? *Revolutions: Theoretical, Comparative, and Historical Studies* / Ed. by J. A. Goldstone, pp. 47–57. San Diego – New York: Harcourt Brace Jovanovich.